these that wage war against his life may be subdued? I think not. Will any one attempt to deny that if a carpenter, or a bricklayer, understands the principle of practical mathematics and mechanics, he will not execute his master's orders better than the perfectly ignorant and uninformed? will not the bleacher and dyer be better qualified to go through their work, with a little knowledge of chemistry; And will not the sailor be improved in his profession, who possesses some information in geography and astronomy? Nay, will not the man only having a pot to boil, be sure to learn from science a lesson which will enable him to cook his scanty pittance better, save his fuel, and both vary his dish and improve it."

Carrying out this view, Sir William Molesworth made the following remarks at the dinner recently given to him in Southwark:—"Every one that has studied the history of mankind must be convinced that, during the last century, especially during the latter half of it, the arts and the sciences have advanced more rapidly than in any other period of which history makes mention. In every department of human knowledge careful investigations have been carried on, and accurate observations have been recorded by patient and laborious men, who have watched, tested, and explored the operations of nature. By these means the old sciences have been extended, and the foundations of numerous new ones have been firmly laid. Thus, astronomy and mechanical science have attained to wonderful perfection. The laws of light, heat, electricity, magnetism and chemistry, have been discovered. The sciences of vegetable and animal philosophy have been created. From these sciences inconceivable arts have sprung, tending to increase the comfort and the well-being of the human race. To the progress of these arts and sciences each of the great European nations has contributed according to the special character of its people. Thus the Germans have been the boldest and most original thinkers. The French have surpassed all others in upholding the positive laws of the universe, and the English have excelled in the *practical application of science to the uses of daily life.*—We study nature, not so much with the great and noble object of discovering her laws, as of deriving benefit from those laws when discovered. We are pre-eminently a practical people. In every branch of human industry, in every occupation which requires mechanical skill and ingenuity, we are unrivalled. In proof of this, I point to the great practical discovery of modern times. I point to the application which we first made of the mechanical powers of *steam* in the production of motion and locomotion. I point to our *steam-engines*, to our factories, and especially to our *railways*. We are now in the act of covering England with railways. Though many of the schemes for that purpose may be hasty and ill judged—though some of them will fail, and the consequence will be pecuniary loss and a season of temporary distress, yet, at no distant period, railways will exist between every town of any importance, and will extend into every district possessing either mineral or agricultural wealth; then journies, which not many years ago required days to perform, will be accomplished in hours, and Great Britian will be like one vast city. The inhabitants of its remote districts will be brought into contact—they will become better acquainted with each others' feelings, opinions, and interests. Local prejudices, the narrow-minded offspring of ignorance and seclusion, will be swept away. Knowledge will be more equally diffused; and men will become more equal, not by being reduced to the same low level, but by being raised to the same degree in the scale of intellect."

What to do and how to do it.—*Bradshaw's Railway Gazette* says:—"We have more than once stated that no good could possibly be effected until the Board of Trade was altogether relieved of its railway duties, and the standing orders annulled. The field thus made clear for active exertion, it would become the duty of Government to select some five or seven of our eminent engineers, and, clothing them with plenary powers, refer all railway matters to their consideration." The suggestion is well worthy of consideration.

CHURCH-BUILDING IN WILTSHIRE.

We have recently alluded to the number of new churches built in Wiltshire. The last report of the "Salisbury Diocesan Church Building Association" shews, that since the commencement of the association, the sum of nearly 11,000*l.* had been disposed of by it in grants, which had led to an expenditure on the part of the public, during the last nine years, of 100,000*l.* Among the events of the past year, the consecration of Wilton church was dwelt upon with a feeling of much satisfaction. That splendid structure was stated to far surpass all that had been done in modern times, and to stand in advantageous competition with the glorious works of former days. During the past year, ten new churches had been opened in the diocese. Since the first establishment of the association, twenty-one new churches had been built, nineteen rebuilt and enlarged, and additional room had been afforded in forty-four others.

THE BRITISH ARCHÆOLOGICAL ASSOCIATION.

On Wednesday evening last this association held their first meeting for the season in the theatre of the Western Institution, Leicester Square. Lord Albert Conyngham was in the chair and addressed the meeting: about 200 persons were present, including a large number of well known active antiquaries.

A very interesting paper by Mr. Lower, was read on the recent discovery of Gundreda's remains at Lewis, and a letter from Mr. Corner questioning the fact that Gundreda *was* a daughter of William the Conqueror as asserted. Some discussion ensued, of which, and other matters brought forward, we may speak on another occasion.

LIST OF NEW PATENTS RELATING TO ARCHITECTURE, ENGINEERING, &c., GRANTED FOR ENGLAND.

Furnished by Mr. A. Prince, of the Office for Patents of Inventions, Lincoln's-inn Fields, London.

[SIX MONTHS FOR ENROLMENT.]

Alexander Bain, of Hanover-street, Edinburgh, engineer, for improvements in electric clocks and telegraphs, part of which improvements are applicable for other purposes. September 25.

Alfred V. Newton, of the Office for Patents, 66, Chancery-lane, mechanical draughtsman, for certain improvements in machinery for manufacturing screws. September 26.

John Reed Hill, of 28, Stamford-street, Lambeth, civil engineer, for certain improvements in atmospheric propulsion, applicable to water as well as land carriage. October 2.

Alfred Hall, of Coxsackie, America, brickmaker, for certain improvements in machinery or apparatus for making, moulding, or manufacturing bricks, tiles, and other articles, from earthy or plastic materials. October 2.

George Daniel Bishopp, of Edgbaston, in the county of Warwick, civil engineer, for improvements in certain engines or machines used for obtaining mechanical power, and for raising and impelling fluids. October 2.

John Simpson, of Langton Rectory, York, clerk, for certain improvements in obtaining and applying motive power. October 2.

Graziano Conte, of Regent-street, Middlesex, merchant, for improvements in machinery for cutting, carving, and sculpturing marble, stone, wood, and other like substances. October 3.

Moses Poole, of the Patent Bill Office, London, gent., for improvements in rails for railways. October 3.

Gabriel Hyppolyte Moreau, residing at No. 18, Boulevard Bonne Nouvelle, Paris, gent., for an improved steam carriage. October 6.

Thomas Russell Crampton, of Southwark-square, Surrey, engineer, for improvements in locomotive engines and railways. October 6.

Thomas Howard, of the King and Queen Iron Works, Rotherhithe, Surrey, iron manufacturer, for improvements in rolling iron bars for suspension bridges and other purposes. October 6.

Joseph Quick, of Sumner-street, Southwark, engineer, for improvements in steam engines. October 9.

John Lake, of Apsley, Herts, civil engineer, for certain improvements in propelling. October 9.

Edmund Morewood, of Thornbridge, Derby, merchant, and George Rogers, of Stearndale in the same county, gent., for improvements in the manufacture of iron into sheets, plates, or other forms; in coating iron, and in preparing iron for coating and other purposes. Oct. 9.

Thomas Wood Gray, of Workworth-terrace, Commercial-road, plumber, for improvements in ports, and apparatus for opening and closing ports of ships or other vessels; also applicable in opening and closing windows, and other instruments having the like movements. Oct. 9.

Henry Francis, of Wardour-street, civil engineer, for improvements in the manufacture of gas. October 9.

Edward Patrick Emerson, of the city of Dublin, doctor of medicine, for improvements in the manufacture of paints, pigments, cements, and other plastic compositions, and in the machinery or apparatus to be used in such manufacture; parts of which improvements are also applicable to the manufacture of artificial stone and marble. October 9.

David Wilkinson, of Potters' Pury, near Stoney Stratford, gent., for improvements in obtaining motive power. October 10.

Frederick Harlow, of Paradise-street, Rotherithe, carpenter, for improvements in atmospheric railways. October 10.

James Hardcastle, of Firwood, Bolton-le-Moors, Lancashire, esq., for certain improvements in the method of conveying water. October 10.

Edmund Barber, of Tring, decorative painter, for certain improvements in graining and decorating in oil, distemper, and other colours, and in imitating marbles, granites, fancy and other woods, and in the apparatus and instruments to be used therein. October 11.

Stephen Reed, of the town of Newcastle-upon-Tyne, gent., for certain improvements in railway rails and chairs. October 16.

Joseph Orsi, of Pimlico, gent., for improvements in sleepers or blocks for supporting railways. October 23.

Thomas Taylor, of Manchester, cabinet-maker, for certain improvements applicable to machinery or apparatus employed for sawing timber. October 23.

Thomas Worsdell, jun., of Stratford, railway carriage builder, for certain improvements in apparatus to be attached to, and employed in connection with, railway carriages. Oct. 23.

William Coles Fuller, of Brownlow-street, Holborn, for improvements in the construction of carriages for railways. October 23.

Thomas Forsyth, of Salford, in the county of Lancaster, engineer, for certain improvements in signals, or in the method of giving signals, which are applicable to the workings of railways, and which are also applicable to maritime purposes, and for certain other improvements in the working of railways. October 31.

Charles Henry Collins, of Lambeth, engineer, for improvements on atmospheric railways. October 31.

Robert William Brandling, of Low Gosforth, in the county of Northumberland, esq., for improvements in railways and railway carriages, for the security and convenience of the public. October 31.

Henry Waller, of Vauxhall-road, Surrey, engineer, for improvements in sluice cocks. October 31.

Dalrymple Crawford, of Birmingham, in the county of Warwick, gent., for certain improved means of, or machinery for arresting the progress of railway carriages and trains. October 31.

Architects putting their "Signatures" to their "Deeds."—This very useful and pregnant suggestion, lately made in this paper on occasion of the royal opening of Lincoln's-inn Hall, has been almost constantly observed in the *old* buildings of the continent. Thus, in St. Stephen's Cathedral at Vienna, *Antony Pilgram*, who chiefly conducted the building of this huge structure, and completed it in 1433, not only placed his *monogram* in a very conspicuous place, but—in the *naive* and hearty way of these times,—a half-length figure of him is placed under the preacher's pulpit, where he, with mediæval barrett on the head, is represented as if looking out of a window. He, certainly, was sure, that his name and memory could not be damaged by thus even more than *signing* his work.—J. L.

For more information on PDF Compression and OCR visit our website